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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/633,121	08/04/2000	Theodore Rappaport	02560032AA	1148

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EXAMINER	
MOORMAN, EARL J	
ART UNIT	PAPER NUMBER
2683	

DATE MAILED: 01/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/633,121

Applicant(s)

RAPPAPORT ET AL.

Examiner

Earl J. Moorman

Art Unit

2683

102

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-8,10,11 and 13 is/are rejected.
- 7) ☒ Claim(s) 2,4,9,12 and 14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/04/00 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a):
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because figure 19 and 21 are illegible. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. **Claims 1 and 10** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,317,599. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both disclose a method and system for

Art Unit: 2683

engineering management and planning for the design of a wireless communications network in three-dimensions that combines computerized organization, database fusion, and radio frequency site-specific planning models.

4. Regarding **claim 1**, claim 1 of U.S. Patent No. 6,317,599 teaches a method for designing or deploying a communications network (Col. 16, lines 20-21), comprising the steps of providing a computerized model which represents a physical environment in which a communications network is or will be installed (Col. 16, lines 22-25), said computerized model providing a display of at least a portion of said physical environment (Col. 16, lines 30-31), providing performance attributes for a plurality of system components which may be used in said physical environment, a number of said system components having associated with them frequency dependent characteristics of said system component (Col. 16, lines 26-29), selecting specific components from said plurality of system components for use in said computerized model and representing said selected specific components in said display (Col. 16, lines 32-33) and running prediction models using the computerized model and said performance attributes to predict performance characteristics of a communications network composed of said selected specific components, said prediction models utilizing said frequency dependent characteristics in calculations which predict said performance characteristics of said communications network (Col. 16, lines 34-36).

5. Regarding **claim 10**, claim 1 of U.S. Patent No. 6,317,599 teaches an apparatus for designing or deploying a communications network (Col. 16, lines 20-21), comprising a means for providing a computerized model which represents a physical environment

Art Unit: 2683

in which a communications network is or will be installed (Col. 16, lines 22-25), said computerized model providing a display of at least a portion of said physical environment (Col. 16, lines 30-31); and performance attributes for a plurality of system components which may be used in said physical environment, a number of said system components having associated with them frequency dependent characteristics of said system component (Col. 16, lines 26-29); a means for selecting specific components from said plurality of system components for use in said computerized model, a means for representing said selected specific components in said display (Col. 16, lines 32-33) and a means for running prediction models using the computerized model and said performance attributes to predict performance characteristics of a communications network composed of said selected specific components, said prediction models utilizing said frequency dependent characteristics in calculations which predict said performance characteristics of said communications network (Col. 16, lines 34-36).

6. **Claims 3, 5, 11 and 13** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of U.S. Patent No. 6,493,679 in view of U.S. Patent No. 6,317,599.

7. Regarding **claims 3 and 11**, U.S. Patent No. 6,317,599 fails to teach an apparatus or method further comprising the means for or step of generating a bill of materials containing cost information for said selected specific components utilized in said communications network.

However, claim 1 of U.S. Patent No. 6,493,679 teaches an apparatus or method

Art Unit: 2683

further comprising the means for or step of generating a bill of materials containing cost information for said selected specific components utilized in said communications network (Col. 20, lines 63-65; Col. 21, lines 8-10).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a bill of materials containing cost information for selected specific components utilized in a communications network to efficiently design and optimize the performance of a wireless communication system.

8. Regarding **claims 5 and 13**, U.S. Patent No. 6,317,599 fails to teach an apparatus or method wherein the display is three dimensional.

However, claim 2 of U.S. Patent No. 6,493,679 teaches an apparatus or method wherein the display is three dimensional (Col. 21, lines 13-14).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a three dimensional display in order to efficiently illustrate a real time environment.

9. **Claims 6-8** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Lee (U.S. Patent No. 6,496,290) in view of U.S. Patent No. 6,317,599.

10. Regarding **claims 6-8**, U.S. Patent No. 6,317,599 fails to teach a method wherein the system components allow converting between radio frequency and optical frequency, optical frequency and baseband frequency, and radio frequency and baseband frequency.

However, Lee teaches a method wherein the system components allow converting between radio frequency and optical frequency (Col. 2, lines 49-60; Col. 3, lines 42-49), optical frequency and baseband frequency (Col. 3, lines 30-42), and radio frequency and baseband frequency (Col. 3, lines 12-14; Col. 3, lines 50-55).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include system components that would convert between radio frequency and optical frequency, optical frequency and baseband frequency, and radio frequency and baseband frequency to allow a design engineer to consider the effects of signal frequency on the electrical performance of the designed communications network.

Allowable Subject Matter

11. **Claims 2, 4, 9, 12 and 14** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. Regarding **claim 2**, the prior art fails to provide a method wherein frequency dependent characteristics define electrical properties of the system components at at least two different frequencies.

13. Regarding **claims 4 and 12**, the prior art fails to teach an apparatus or method wherein the cost information comprises a maintenance schedule for selected specific components.

Art Unit: 2683

14. Regarding **claims 9 and 14**, the prior art fails to teach an apparatus or method further comprising a means for or the step of identifying errors in physical media connections for two or more specific components selected in the selecting step.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Earl J. Moorman whose telephone number is (703) 305-8158.

The examiner can normally be reached on Monday-Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William G. Trost can be reached on (703) 308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-9508 for regular communications and (703) 305-9508 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Earl Moorman *EJM*
January 2, 2003

Lee Nguyen
Primary Examiner

